

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-13. (Canceled)

14. (Currently Amended) A probe, comprising:

an outer member defining a distal end and including a wall defining an interior bore;

an elongate body carried within the outer member interior bore, the elongate body defining a proximal region, a distal region and a distal end operably connected to the distal end of the outer member, the elongate body including an internal fluid lumen extending from the proximal region to the distal region, and the distal region of the elongate body including a hinge portion located proximal of the distal end of the elongate body and having a flexibility that is greater in a bending direction than the flexibility of the portions of the elongate body that are immediately proximal and distal thereto; and

an inflatable tissue coagulation body supported on the elongate body distal region and operably connected to the internal fluid lumen.

15. (Original) A probe as claimed in claim 14, wherein the inflatable tissue coagulation body is proximal to the hinge portion.

16. (Previously Presented) A probe, comprising:

an outer member defining a distal end and including a wall defining an interior bore;

an elongate body carried within the outer member interior bore, the elongate body defining a proximal region, a distal region and a distal end operably connected to the distal end of the outer member, the elongate body including an internal fluid lumen extending from the proximal region to the distal region, and the distal region of the elongate body including a hinge portion located proximal of the distal end of the elongate body;

an inflatable tissue coagulation body supported on the elongate body distal region and operably connected to the internal fluid lumen; and

at least one sensing element;

wherein the inflatable tissue coagulation body is located one of distal to and proximal to the hinge portion and the at least one sensing element is located the other of distal to and proximal to the hinge portion.

17. (Previously Presented) A probe as claimed in claim 14, wherein the inflatable tissue coagulation body comprises a half-balloon tissue coagulation structure.

18-20. (Canceled)

21. (Previously Presented) A probe for use with an outer member including a wall defining an interior bore, the probe comprising:

a tissue coagulation body; and

an elongate catheter tube, defining a distal region that supports the tissue coagulation body and a distal end, adapted to be carried within the outer member interior bore and extend outwardly from the interior bore such that the distal region forms a loop, the elongate catheter tube including a hinge located proximal of the distal end and defining the apex of the loop formed by the distal region, the apex of the loop having a flexibility that is greater in a bending direction than the flexibility of the portions of the elongate catheter tube that are immediately proximal and distal thereto and that allows the apex of the loop to be inserted into a pulmonary vein to such an extent that the tissue coagulation body will be substantially aligned with the pulmonary vein ostium.

22. (Previously Presented) A probe as claimed in claim 21, wherein the elongate catheter tube defines an exterior and a proximal region, the probe further comprising:

a control element defining a distal portion that extends from the distal end of the elongate catheter tube and a proximal portion extending along the exterior of the elongate catheter tube toward the proximal region of the elongate catheter tube.

23. (Previously Presented) A probe as claimed in claim 21, wherein the loop defines a length and a height and the flexibility of the hinge is such that the loop length will be at least two times the loop height.

24. (Canceled)

25. (Previously Presented) A probe as claimed in claim 21, wherein at least the distal region of the elongate catheter tube includes a flexible spline and the hinge is defined by a portion of the flexible spline which has a flexibility that is greater in the bending direction than the flexibility of the portions of the flexible spline that are immediately proximal and distal thereto.

26. (Previously Presented) A probe for use with an outer member including a wall defining an interior bore, the probe comprising:

a tissue coagulation body;

an elongate catheter tube, defining a distal region that supports the tissue coagulation body and a distal end, adapted to be carried within the outer member interior bore and extend outwardly from the interior bore such that the distal region forms a loop, the elongate catheter tube including a hinge located proximal of the distal end and defining the apex of the loop formed by the distal region, the apex of the loop having a flexibility that is greater in a bending direction than the flexibility of the portions of the elongate catheter tube that are immediately proximal and distal thereto and that

allows the apex of the loop to be inserted into a pulmonary vein to such an extent that the tissue coagulation body will be substantially aligned with the pulmonary vein ostium; and

at least one sensing electrode;

wherein the tissue coagulation body is located on one side of the hinge and the at least one sensing electrode is located the other side of the hinge.

27. (Original) A probe as claimed in claim 21, wherein the tissue coagulation body comprises an inflatable tissue coagulation body.

28. (Original) A probe as claimed in claim 27, wherein the inflatable tissue coagulation body comprises a half-balloon structure.

29. (Original) A probe as claimed in claim 27, wherein the inflatable tissue coagulation body includes micropores.

30. (Previously Presented) A probe for use with an outer member including a wall defining an interior bore, the probe comprising:

an inflatable heated tissue coagulation body; and

an elongate catheter tube, defining a distal region that supports the inflatable heated tissue coagulation body and a distal end, adapted to be carried within the outer member interior bore and extend outwardly from the interior bore such that the distal region forms a loop, the elongate catheter tube including a hinge located proximal of the distal end and defining the apex of the loop formed by the distal region, the apex of the loop having a flexibility that is greater in a bending direction than the flexibility of the portions of the elongate catheter tube that are immediately proximal and distal thereto and that allows the apex of the loop to be inserted into a pulmonary vein to such an extent that the inflatable heated tissue coagulation body will be substantially aligned with the pulmonary vein ostium.

31-37. (Canceled)

38. (Previously Presented) A probe as claimed in claim 14, wherein the wherein the elongate body comprises a catheter body and the outer member comprises a sheath.

39. (Previously Presented) A probe as claimed in claim 17, wherein the wherein the elongate body comprises a catheter body and the outer member comprises a sheath.

40-46. (Canceled)

47. (Previously Presented) A probe as claimed in claim 14, wherein the entire inflatable tissue coagulation body is longitudinally spaced from to the hinge portion.

48. (Previously Presented) A probe as claimed in claim 16, wherein the inflatable tissue coagulation body is proximal to the hinge portion.

49. (Previously Presented) A probe as claimed in claim 16, wherein the inflatable tissue coagulation body comprises a half-balloon tissue coagulation structure.

50. (Previously Presented) A probe as claimed in claim 16, wherein the wherein the elongate body comprises a catheter body and the outer member comprises a sheath.

51. (Previously Presented) A probe as claimed in claim 16, wherein the hinge portion has a flexibility that is greater in a bending direction than the flexibility of the portions of the elongate body that are immediately proximal and distal thereto.